

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4 (Cancelled).

5. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22 wherein the ~~plurality of nested elbow patterns have~~ recurring wavy profile has a flat region on the outside of a wave back.

6. (Previously presented) The heat exchanger as claimed in claim 5 wherein the flat region is between 0.1 mm and 0.4 mm in a cross section of the legs.

7. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein an angle formed by legs of one of the ~~nested elbow patterns~~ recurring wavy profiles is between 45° and 135°.

8. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22 wherein a depth of the ~~plurality of nested elbow patterns~~ recurring wavy profile is, in the case of liquid media between 0.5 mm and 1 mm and in the case of gaseous media between 0.6 mm and 2 mm.

Claim 9 (Cancelled).

10. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the ~~plurality of nested elbow patterns comprise~~ recurring wavy profile ~~comprises~~ embossings in the plate, the plates comprising aluminum and being coated on at least one side with soldering aid material.

11. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the plates have as inflow lines and outflow lines in each case a pair of bores perpendicularly with respect to the plate plane, the bores being raised with respect to the basic plane in such a way that there is a fluidic connection from one of the two bores alternately only to every second plate interspace.

12. (Currently amended) The heat exchanger as claimed in claim 11, wherein the raised region of at least some of the bores is surrounded by a region preferably leading around annularly and free of the ~~plurality of nested elbow patterns~~ recurring wavy profile.

Claim 13 (Cancelled).

14. (Previously presented) The heat exchanger as claimed in claim 11, wherein the bores assigned to the inflow lines are oval, elliptical or rectangular.

15. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein two plates different from one another in terms of the plurality of nested elbow profiles recurring wavy profiles are used alternately, ~~the nested elbow patterns of the two plates differing from one another at least in terms of one of the features comprising leg length, leg angle and profile depth.~~

16. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the nested elbow patterns recurring wavy profiles of one side of the plate plates differ from the nested elbow pattern recurring wavy profiles of the other side of the plate plates ~~at least in terms of one of the features comprising leg length, leg angle and profile depth.~~

17. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the ~~nested elbow patterns~~ recurring wavy profiles of adjacent plates are identical to one another.

18. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein ~~the heat exchanger is formed from a stack of plates,~~ the plates corresponding to one another and being arranged so as to be rotated alternately through 180° with respect to one another.

Claim 19 (Cancelled).

20. (Currently amended) The heat exchanger as claimed in ~~claim 19~~ claim 22, wherein the bent edges of a plurality of the plates mutually overlap.

21. (Currently amended) The heat exchanger as claimed in ~~claim 19~~ claim 22, wherein the ~~nested elbow profile~~ recurring wavy profile extends into the edge.

22. (Previously presented) A heat exchanger for motor vehicles, the heat exchanger being formed from interconnected plates, there being formed between the plates cavities which are closed off outwardly and through which a first and a second medium flow alternately in each case via at least one inflow line and outflow line, the plates being profiled in such a way that, between the respective profiles of the plates, contact points occur, in the region of which the plates are fastened to one another, wherein the profiles of the plates and their contact points are designed in such a way that the flow, formed between the plates, of the first and the second medium from the corresponding inflow line to the corresponding outflow line does not run rectilinearly,

wherein the plates have a recurring wavy profile which extends essentially transversely with respect to the main throughflow direction (H),

wherein the plates have a bent edge, the edges of adjacent plates bearing one against the other and being connected to one another by brazing; and

wherein between the end of the wavy profile and the edge, a profile-free bending portion is formed, the width of which is smaller than 2 mm and is determined in such a way that, during the brazing of the plates, a throughflow of medium in the bending portion is reduced or essentially prevented.

23. (Previously presented) The heat exchanger as claimed in claim 11, wherein at least one end face of the heat exchanger is assigned a closing plate which is profileless at least on the outside and which has connection points for a first and second medium, said connection points issuing into connecting lines and being arranged in alignment with the bores.

Claim 24 (Cancelled).

25. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the hydraulic diameter (hD) has an average value of either between 1 mm and 2 mm or around 3 mm.

26. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the contact points between two plates adjacent to one another are distributed uniformly over the plate surface.

27. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the contact points between two plates adjacent to one another have a surface density of 4 to 7 per cm^2 .

28. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein a phase transition of a medium takes place in plate interspaces.

29. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the installation position of the heat exchanger is determined such that the transverse distribution of the medium in the plate interspaces is assisted by gravitation.

30. (Currently amended) A method for the production of a heat exchanger as claimed in ~~claim 4~~, claim 22 wherein the method comprises the steps of embossing the plates, of stacking the plates one on the other and of fastening them to one another, by brazing.

31. (Previously presented) The method as claimed in claim 30, wherein the stacking of the plates one on the other takes place such that two adjacent plates are in each case rotated through 180 degrees with respect to one another.

32. (Currently amended) The method as claimed in claim 30, wherein brazing takes place in such a way that the plates are connected sealingly to one another at their edge, a connection of adjacent plates to one another at contact points of ~~nested-elbow patterns~~ the recurring wavy profile taking place at the same time.

33. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein said ~~plurality of nested-elbow patterns~~ recurring wavy profiles include at least three regions of curvature and at least four legs.

34. (Currently amended) The heat exchanger as claimed in ~~claim 4~~ claim 22, wherein the plates have first and second opposite side edges and first and second opposite end edges and wherein said ~~plurality of nested elbow profiles~~ recurring wavy profiles extend from said first side edge to said second side edge and from said first end edge to said second end edge.

35. (Currently amended) The heat exchanger as claimed in claim 34, including at least two openings interrupting said ~~plurality of nested elbow patterns~~ recurring wavy profiles.

Claims 36-39 (Cancelled).